



## MEMORANDUM

**TO:** Low Income Consumer Advisory Task Force

**FROM:** Denise Kuehn and Liz Jambor

**DATE:** March 25, 2015

**SUBJECT:** Single Family Energy Efficiency Data

Attached is the response to a question posed by Chris Strand. The question was:

Average per home retrofitted within the past three years (using actual utility bills and normalized weather data)

- a) \$/kw customer savings with weatherization retrofits and total yearly cost before and after retrofits
- b) \$/kw customer savings with weatherization and HVAC retrofits and total yearly cost before and after retrofits
- c) \$/kw customer savings with weatherization, refrigerator and HVAC retrofits and total yearly cost before and after retrofits
- d) Number of days to complete for each of the above three scenarios
- e) Rental vs owned for each of the above first three scenarios
- f) Average cost per home for each of the above first three scenarios
- g) Payback in years
- h) Provide each measure \$/kw and \$/kwh savings

The data aligns with the question as we are able to collect and provide the data. If you have any further questions, please let us know.

**Response to Question 1**

**Submitted by Chris Strand**

**12/14/2014**

| Metric  | AE Rebate | Gas Rebate | Deemed kW | HVAC Cost | HVAC Rebate | HVAC New Seer | Attic Insulation Cost |
|---------|-----------|------------|-----------|-----------|-------------|---------------|-----------------------|
| Average | \$1,623   | \$293      | 0.87      | \$7,721   | \$730       | 16            | \$1,169               |
| Median  | \$1,913   | \$329      | 0.96      | \$6,723   | \$650       | 16            | \$1,111               |

| Metric  | Attic Insulation Rebate | Existing R Value | R Value Added | Radiant Barrier Cost | Radiant Barrier Rebate | Comp Cost | Comp Rebate |
|---------|-------------------------|------------------|---------------|----------------------|------------------------|-----------|-------------|
| Average | \$158                   | 15               | 24            | \$458                | \$18                   | \$820     | \$251       |
| Median  | \$160                   | 15               | 24            | \$0                  | \$0                    | \$749     | \$228       |

| Metric  | Screen Cost | Screen Rebate | Window Cost | Window Rebate | Sys Perf Cost | Sys Perf Rebate | Duct Replace Cost |
|---------|-------------|---------------|-------------|---------------|---------------|-----------------|-------------------|
| Average | \$677       | \$108         | \$3,665     | \$18          | \$373         | \$129           | \$1,642           |
| Median  | \$450       | \$80          | \$786       | \$0           | \$316         | \$200           | \$1,500           |

| Metric  | Duct Replace Rebate | Duct Replace Gas Rebate | Duct Insulation Cost | Duct Insulation Rebate | Drape/Bury Cost | Drape/Bury Rebate | WX Bonus |
|---------|---------------------|-------------------------|----------------------|------------------------|-----------------|-------------------|----------|
| Average | \$159               | \$72                    | \$1,055              | \$8                    | \$130           | \$9               | \$969    |
| Median  | \$144               | \$40                    | \$1,069              | \$0                    | \$100           | \$0               | \$1,000  |

| 2012 Billed kWh | 2013 Billed kWh | 2014 Billed kWh | Savings 2012 to 2014 | 2014 \$/kWh Saved | \$/Deemed kW | Annual kWh/sqft |
|-----------------|-----------------|-----------------|----------------------|-------------------|--------------|-----------------|
| 14,455          | 13,977          | 12,318          | 2,137                | \$0.75            | \$3,168.00   | 1.17            |
| 12,561          | 11,705          | 10,281          | 1,936                | \$0.48            | \$2,316.20   | 1.02            |

| Metric  | Annual Deemed kw/sqft | Rebate/sqft | Actual Cost Minus Rebate | Avg Payback Time in Years |
|---------|-----------------------|-------------|--------------------------|---------------------------|
| Average | 0.00                  | \$1.10      | \$5,456                  | 9.1                       |
| Median  | 0.00                  | \$1.07      | \$5,311                  | 11.8                      |

*Based on 1927 homes participating in 2013.*

*2013 data used to provide the 12 months pre and post data.*

*Data based on program data and billing data.*